#### **MINUTES OF**

#### UNIVERSITY COMMITTEE ON CURRICULA

#### October 3, 2018

Present: K. Basom, D. Hakes, C. Christopher, M. Fienup, A. Gabriele, J. Zhu, C. Nedrow, S. Riehl, P. Pease, G. Rhineberger-Dunn, J. Smothers, D. Wallace

Absent: D. Heistad, K. Martin, J. Morrow, G. Pohl

Guests: M. Clayton, T. Spradling, I. Simet, C. Weeks, S. Morgan, D. Mupasiri, T. Kidd, L. Riedle, K. Strong, M. Somodi

The meeting was called to order by P. Pease at 3:02 p.m. in the Presidential Room, Maucker Union.

#### I. Welcome and Introductions

P. Pease welcomed all present. Introductions followed.

## II. Approval of the Minutes – September 26, 2018

S. Riehl moved to approve the September 26 meeting minutes, J. Zhu seconded.

P. Pease called for a vote on the approval of the minutes. The motion passed with a vote of 5- Yes; 0 – No, 1 -- Abstention.

#### III. Curriculum Review Procedures for Consent Agenda Items – All Departments

S. Riehl moved to approve consent agenda. J. Zhu seconded.

P. Pease asked if there is any discussion or items that the committee would like to have removed from the consent agenda.

# Hearing none, P. Pease called for a vote on the motion to approve all items on the consent agenda. Motion carried and was approved unanimously.

#### **Department of Biology**

• BIOL 4129 Genomics (editorial, change in title, description and frequency)

## **Department of Chemistry**

- CHEM-BS Chemistry Major (change in notes, updated language and requirements for non-certified Bachelor of Science)
- CHEM-MINOR Chemistry Minor (adding one course as an elective option)
- CHEM 1110 General Chemistry I (substantive, prerequisites)
- CHEM 3600 Undergraduate Research in Chemistry (substantive, prerequisites, increase in repeat options)

## **Department of Earth & Environmental Sciences**

- EARTHSCI 1410 Field Studies in \_\_\_\_\_ (editorial, updated description)
- EARTHSCI 3315 Earthquakes and Tsunamis (dropped)
- EARTHSCI 3220 Weather Analysis and Forecasting (substantive, prerequisites)
- EARTHSCI 3330 Geomorphology (substantive, frequency)
- EARTHSCI 3400 Topics in Earth and Environmental Science (editorial, title, description)
- EARTHSCI 3410 Field Studies in \_\_\_\_\_ (editorial, description)

- EARTHSCI 3420 Readings in Earth and Environmental Science (editorial, title, description)
- EARTHSCI 4400 Undergraduate Research in Earth and Environmental Science (editorial, title, description)

## **Department of Mathematics**

- MATHK8TCHG-MINOR Mathematics Minor (K-8) Teaching (dropping 1 credit/required course)
- MATHSTATACTSCI-BA Mathematics Major Statistics/Actuarial Science (adding extra elective option)
- MATH 2303 Introduction to Teaching Secondary Mathematics (substantive, prerequisite)
- MATH 3302 Field Experience in Teaching Secondary Mathematics (substantive, change to credit/no credit)
- MATH 3304 The Teaching of Secondary Mathematics (substantive, prerequisite)
- MATH 3313 Topics in Secondary Mathematics (substantive, prerequisite/corequisite)
- MATH 3640 History of Mathematics (substantive, title, description)

## **Department of Technology**

- GRAPHTECH-MINOR Graphic Technology Minor (change in title)
- TECH-BAS Technology Major (dropping and adding of 2 courses)
- TECHMGMT-BA Technology Management Major (dropping of one elective course)
- TECHMGMT-MINOR Technology Management Minor (dropping/adding one course)
- TECH 1006 Project Lead The Way: Introduction to Engineering Design (substantive, term offered)
- TECH 1011 Introduction to Graphic Programs (substantive, terms offered)
- TECH 1022 Communication Technology (substantive, terms offered, frequency)
- TECH 1024 Technical Drawing and Design I (substantive, prerequisite)
- TECH 1025 Construction Graphics (dropped)
- TECH 2024 Technical Drawing and Design II (editorial, description)
- TECH 2072 Engineering Materials (substantive, description)
- TECH 3177 Advanced Manufacturing Processes (substantive, prerequisites, frequency)
- TECH 4100 Undergraduate Research in Construction Management (dropped)
- TECH CM 1000 Introduction to Construction Processes (substantive, prefix, number, description)
- TECH CM 1050 Construction Safety (substantive, prefix, number, description)
- TECH CM 2050 Construction Law (substantive, prefix, number, title, prerequisites, terms offered)
- TECH CM 3000 Civil Construction (substantive, prefix, number, title, prerequisites/corequisites, terms offered)
- TECH CM 3050 Construction Estimating (substantive, prefix, number, prerequisites, terms offered)
- TECH CM 3100 Electrical Construction Materials and Methods (substantive, prefix, number, prerequisites)
- TECH CM 3150 Construction Project Planning and Scheduling (substantive, prefix, number, title, description, prerequisite, frequency)
- TECH CM 4050 Construction Management (substantive, prefix, number, title, description, prerequisite, frequency)
- TECH CM 4300 Construction Technology and Innovation (substantive, prefix, number, title, description, Prerequisites/corequisites, terms offered)

## IV. Curriculum review procedures for the curriculum packet of the Department of Physics

S. Riehl moved to approve curriculum packet for Department of Physics, J. Zhu seconded.

Program for discussion:

• PHYSICS-BA Physics Major (edited, adding emphasis)

S. Riehl stated that there were questions regarding the format of the proposal. Since the pre-meeting the Department of Physics clarified the questions and provide edits to make the major and emphases clearer. T. Kidd stated the reason for the additional emphasis is for recruitment and guidance of students to enter into the growing field of data science. Currently there are not many data science programs in the United States at the undergraduate level. At this point, there is not the creation of new courses but a compilation of existing courses.

T. Gabriele asked how this compares to other undergraduate programs in the United States. T. Kidd mentioned most other programs are housed in business or engineering. T. Kidd added if there becomes a large demand for the data science emphasis, it may be a logical step to create a specific major in data science which is more interdisciplinary. P. Pease stated there are several discussions throughout campus having to do with data science such as in the College of Business Administration and Computer Science Department. P. Pease encouraged more collaboration across campus so each department doesn't create their own programs and courses in data science.

# P. Pease called for a vote on the motion to approve the curriculum packet of the Department of Physics. Motion carried and was approved unanimously.

V. Curriculum review procedures for the curriculum packet of the Department of Earth and Environmental Sciences

S. Riehl moved to approve curriculum packet for Department of Earth and Environmental Sciences, J. Zhu seconded.

Courses for discussion:

- EARTHSCI 3365 Hydrology Seminar (new)
- EARTHSCI 3370 Geologic Field Methods (new)

S. Riehl stated there was a question as to where these courses would be used because they don't specifically show up listed under specific major requirements. S. Morgan explained that they do fit into the majors as electives since most programs list any Earth Science courses as elective options.

M. Fienup asked about course fee for EARTHSCI 3370. S. Morgan explained it was approved when the course was offered experimentally. They will likely need to go through the fee approval process again now that it is becoming a permanent course. S. Morgan highlighted that the costs are used for consumables, gas for travel and equipment, field gear, as well as maintenance of mass spectrometer and GIS equipment. All of these are important for students to gain the experiences and skills they need for a career in environmental and geological analysis.

# P. Pease called for a vote on the motion to approve the curriculum packet of the Department of Earth and Environmental Sciences. Motion carried and was approved unanimously.

## VI. Curriculum review procedures for the curriculum packet of the Department of Technology

S. Riehl moved to approve curriculum packet for Department of Technology, J. Zhu seconded.

Programs for Discussion

- CONSTMGMT-BS Construction Management Major (change, reduction of hours, no longer extended major, updated course options/requirements)
- MFGTECH-BS Manufacturing Engineering Technology Major (dropping of one course/proficiency)

• TECHEDTCHG-BS Technology and Engineering Education Major-Teaching (updating course due to course change)

Courses for Discussion

- TECH 1008 Basic Manufacturing Processes (substantive, description)
- TECH 3143 Managing Operations and Manufacturing Systems (editorial, description)
- TECH CM 1100 Construction Documents (new)
- TECH CM 2000 Land, Route, and Construction Surveying (substantive, prefix, number, graduate level, description, prerequisites, terms offered)
- TECH CM 2100 Mechanical Systems in Construction (substantive, prefix, number, description, prerequisites/corequisites)
- TECH CM 3250 Computerized Project Management (new)
- TECH CM 4200 Structural Components of Construction (substantive, prefix, number, graduate level, prerequisites/corequisites, terms offered)
- TECH CM 4400 Construction Management Senior Project (new)

**CONSTMGMT-BS Construction Management Major**, M. Fienup stated that ENGLISH 3772 has a prerequisite course that is required so the major should include the hidden prerequisite. L. Riedle stated that most of their majors are transfer students and need to seek permission from the English Department to add ENGLISH 3772 since the listed prerequisite is not a direct match for the English course transfer students have taken. L. Riedle added it may be misleading to students that they need to take an additional English course when what they need to do is request permission to add the course. M. Fienup added that listing the required prerequisite course won't change if students are able to directly register for ENGLISH 3772. The system is doing what it should be doing since the specific prerequisite is not being met. P. Pease stated that the requirements or exceptions made for ENGLISH 3772 would need to be handled at the advising level and the department may want to speak with the English Department about the course and challenges involved with registration. J. Zhu stated the added required English course will essentially be satisfied through a substitution since the English course that is being transferred in is not recognized as a prerequisite for ENGLISH 3772. Since it has been common practice to add hidden prerequisites to programs as they come up for review, ENGLISH 1005 will be added to the major requirements for the Construction Management major.

S. Riehl asked since it is a Bachelor of Science degree, what course is meeting the research, internship, project requirement. L. Riehl stated it is TECH CM 4400 Construction Management Senior Project.

S. Riehl also requested that MATH 1150 be listed with an \* asterisk to clarify required ALEKS score. M. Fienup wanted to recognize the department's work in taking this major from an extended program to not an extended program.

**MFGTECH-BS Manufacturing Engineering Technology Major** S. Riehl stated there are a number of courses that need a notation of additional prerequisites. There should be an \* asterisk and a footnote. The courses identified include: MATH 1150, MATH 1420, CHEM 1110, PHYSICS 1701, TECH 2038, TECH 3192, MGMT 3113, COMM 3155 and SOC 3090/SW 3102/ANTH 3470.

G. Rhineberger-Dunn clarified that SOC 3090 is no longer being offered. D. Wallace will update.

S. Riehl asked for confirmation that TECH 4110 should not have any corequisites. Since TECH 4210 has a corequisites of TECH 4110, should TECH 4110 have a corequisites of TECH 4210. L. Riedle confirmed for TECH 4110 they are all pre-or-co-requisites.

S. Riehl asked which course in this Bachelor of Science fulfills the research, internship, project requirement. L. Riedle stated TECH 4210 Manufacturing Senior Projects.

S. Riehl asked which course serves as the required cognate needed for Bachelor of Science programs. S. Riehl and P. Pease explained the requirements from the UCC handbook that outlines the definition of a cognate for Bachelor of Science programs. It needs to be an upper level, 3000/4000 course, in area outside of the major field of study. S. Riehl added that since the Department of Technology is broad in its focus and disciplines, it may be acceptable that it is a course within the department but not closely connected with the major.

P. Pease stated on the surface it doesn't appear that this program has a cognate course listed. UCC could request that it be added if they don't believe the requirement is met or if it does meet the requirements of a BS the committee can vote on it as it is.

L. Riedle unclear as to what the cognate would have been in the past because they are not dropping any courses that appear to have met the cognate definition. S. Riehl speculates that it was dropped at some time.

K. Basom asked for clarification of where the requirement is outlined. P. Pease and D. Wallace confirmed it is in the UCC Handbook and Catalog.

K. Strong offered that TECH 4187 Applied Industrial Supervision and Management be considered to meet the cognate requirement since it is not a technology course but is a management course and meets the intent of an upper-level course in a different discipline.

G. Rhineberger-Dunn asked if we need to clarify which course is satisfying the cognate requirement. Possibly adding a carrot or other symbol with a note that the course is meeting the cognate requirement for the degree. L. Riedle stated it would be helpful to add that for future tracking. D. Wallace will add a symbol and note to indicate TECH 4187 serves as the required cognate.

**TECHEDTCHG-BS Technology and Engineering Education Major-Teaching** J. Zhu clarified that the formatting is incorrect. TECH 1018 is being replaced by TECH CM 1000. TECH CM 1000 is appearing at the bottom of the major requirements but should be moved up to clearly show the change. D. Wallace confirmed the Registrar's Office will update the formatting.

S. Riehl asked about the formatting of TECH 4290 or PHYSICS 4290. Since they are the same class cross listed in two departments, the students may have the misconception they have a choice in which course to choose when they are actually the same course. D. Wallace stated that is the correct format for cross listed courses. P. Pease added the current format maybe helpful for students because there could be an error in the schedule of classes and both classes maybe not be listed if the other department doesn't remember to add it to their list of courses.

S. Riehl asked if the total number showing in the major is correct. It is summing to 57 credits but S. Riehl gets a total of 60 credits. L. Riedle confirms it is currently a 60 hour major and staying as 60 hour major. When TECH COMM 1000 is moved to the correct location it will correct the summing error.

M. Fienup asked how a teaching major can be a Bachelor of Science degree. What course is meeting the research, project or internship requirement. S. Riehl clarified that student teaching, TEACHING 4170 Student Teaching meets the internship requirement.

TECH 1008 S. Riehl asked about wood being taken out of the course content and what impact that will have on teaching majors. C. Christopher clarified that the Iowa Board of Educational Examiners doesn't specifically require experience working with wood. L. Riedle added that working with composites could be the alternative material being used in high school and middle school classes.

TECH 3142 S. Riehl asked if prerequisites are listed accurately. L. Riedle confirmed they are.

TECH CM 1100 is a new course and the committee had no questions or concerns.

TECH CM 2000 was not on the consent agenda because it wasn't reviewed at the pre-meeting. In looking over it, S. Riehl has no concerns at this time. M. Fienup wondered if there might be some overlap with GIS/Geography courses. P. Pease stated that there is likely little overlap since geography courses focus on GPS and not the surveying equipment, techniques or calculations covered in this class.

TECH CM 2100 S. Riehl asked if the prerequisites are correct. L. Riedle confirmed they are removing all prerequisites except for a required pre-or-co-requisite of TECH CM 1100. It was asked if the GPA requirement was being removed. L. Riedle confirmed the GPA requirement for the course is being dropped.

TECH CM 3250 M. Fienup, concerned the syllabus is not well developed and hasn't been taught in the past. K. Strong and L. Riedle stated it is intentionally vague because they are researching software options. P. Pease asked if changing software will there be additional costs for the course. K. Strong explained the department is eliminating one software and is looking to move to a cloud-based program that offers free student licenses. With that model they do not anticipate additional costs above what the department currently spends. P. Pease asked M. Clayton if the Dean's Office is supportive of these potential cost differences. M. Clayton confirmed the Dean's Office is supportive.

TECH CM 4200 is a revised course and will be the same as TECH 4175. S. Riehl asked if the new course truly is an equivalent to the old course. L. Riedle confirmed it is same content being approached in a different way. K. Strong added the new course is more software driven versus manual calculation in the old course. Because the course is being offered at the graduate level, junior standing needs to be added as a prerequisite.

TECH CM 4400 Construction Management Senior Project; M. Fienup asked if the department wanted to add senior standing as a prerequisite. K. Strong and L. Riedle liked the suggestion and will add Senior Standing as a prerequisite.

**P.** Pease called for a vote on the motion to approve the curriculum packet of the Department of Technology. Motion carried unanimously.

## VII. Next Meeting – Wednesday, October 10, 3:00pm – Presidential Room --MAU

P. Pease stated the next meeting would be **3:00 p.m., Wednesday, October 10 in Presidential Room, Maucker Union**. The topics for discussion are items that were previously tabled. They include curriculum proposals for the Department of Management, School of Applied Human Sciences, Department of Social Work, and Interdisciplinary.

P. Pease asked if we need to have two meetings for clean-up or could we get through it all in one session. D. Wallace stated it appears to her that most of the programs are well developed and all items could be covered in one meeting.

P. Pease asked for clarification on the LYHS/RTCS proposals. D. Wallace explained in meeting with O. Grybovych she believes all concerns have been addressed. O. Grybovych has created a grid of the proposals and could send it to the UCC ahead of the meeting so they have time to consider the proposals.

D. Hakes stated the Department of Management is pulling their proposal to add a new course MGMT 3123, therefore only the revised MIS major will be coming to the clean-up meeting.

S. Riehl has worked with Department of Social Work and doesn't believe there will be a lot of concerns. The curriculum proposals now appear pretty clear.

P. Pease will have C. Nedrow send out LYHS revisions and will plan to cover everything at one clean-up meeting on October 10.

P. Pease clarified UCC will have a meeting on October 17<sup>th</sup> to discuss the curriculum cycle and how we might be able to get things approved in one year.

M. Fienup motioned to adjourn. D. Hakes seconded.

The meeting adjourned at 4:14pm

Respectfully submitted,

Joan Smothers Office of the Registrar jps

cc: UCC Guests